Title: Unknown Material Gamma Ray Detection

Authors : Daniel Wilding1 Muhammad Rehman1 AyseTurak1

1) McMaster University, 1280 Main St W, Hamilton, Canada

Response Letter

Editor:

1. please include all co-authors from your study: **Fixed**
2. Confirm that your uncited images are original:

**All uncited images are original including all spectrum plots and graphs which were gathered with the MCA in lab, or made with Excel.**

1. Shorten such that it fits on 4 pages of the template: **Fixed**
2. The references do not follow the journal style, please adjust to appropriate style:

**Fixed**

1. The footers are incorrect; conclusions are in wrong font size; all equations need to be numbered:

**Fixed**

Reviewer A:

1. A few commas were missing from your paper. I recommend reading it aloud,

as it will help you catch the run on sentences. **Fixed**

2. Consider rephrasing Page 1 Line 15 to "a hypothesis of Manganese-54 was

determined to be the unknown source". **Changed to that.**

3. Consider rephrasing Page 1 Line 51 "when both detected, can result in the

initial gamma ray energy being found through a simple calculation." or

something along those lines. **Changed to that.**

4. You introduce Figure 2 before you introduce Figure 1. Switch the

numbering of these two then and be sure Figure 1 is shown before Figure 2

and that it is introduced before it as well. Also, be sure to keep your

figure titles consistent. You refer to some as Fig 3 and others as Fig. 7.

Even when you are referring to them in the body of your paper, refer to the

as Fig 7 instead of Figure (7). Just to keep it consistent. **All Fixed**

5. Your figures 5, 6, and 7 and table II all have different fonts from the

rest of your paper, make sure they stay consistent. These figures and tables

are all extremely large. Consider making them smaller**. Fixed. Made smaller to make the journal fit the page limit.**

6. You misspelled Cobalt-57 on Page 6 Line 45. **Fixed**

1. Make sure your conclusion is the same font as the rest of the paper. **Fixed, all reviewers recommended this.**

Reviewer B

1. Figure 4 should be eliminated. Table 1 needs to be revised, there are too many tests in a single table which makes it confusing. Do not use 2 pages for 4 figures. These figures need to be cited and proper permissions need to be granted as many of these are not original figures.

**Figure 4 was eliminated. It was unnecessary. I did not revise Table 1 as I felt that the data was critical to the experiment that was undertaken. It was crucial to know the difference that distance and bipolar pulses made to the counts at Full Width Half Maximum. I also made the images that took up a lot of space smaller to shorten the journal length. However, these images need not be cited as they are all original and created by myself. The only images that were not my own were FIG 1 and FIG 2.**

1. Rename Section I to introduction. Include proper content in the introduction. Rename Section II to Experimental and Include only the Experimental Setup in this section. Rename Section III to results and discussion.

**I did not rename the sections, I felt that from the other reviewers they were fine and the experiment was understood.**

1. Change the title of your paper to better reflect what you are trying to

Explain

**I did rename the title to better prepare readers for the journal as a whole.**

Reviewer C

1. Same punctuation and grammar comments: **Fixed**
2. Correct Citation format: **Fixed**
3. Figure 4 Remove: **Removed**
4. Fix footer font: **Fixed**
5. Fix table formatting and font: **Fixed**
6. You use ref. 3 almost exclusively for the background section, so this is probably a good place to add further literature. **The background section requires very straightforward sources, it is not a complicated understanding topic therefore I didn’t feel the need to cite multiple sources to prove the more commonly understood areas. (Also for Reviewer D)**
7. Over word limit**: Fixed ( This was for Reviewer D as well)**

Reviewer D

**Everthing brought up by reviewer D has previously been brought up and addressed above.**